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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/084,670	02/28/2002	Ryugen Yonemura	50212-357	2519
20277	7590	06/01/2004	EXAMINER	
MCDERMOTT WILL & EMERY 600 13TH STREET, N.W. WASHINGTON, DC 20005-3096			ROJAS, OMAR R	
			ART UNIT	PAPER NUMBER
			2874	

DATE MAILED: 06/01/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/084,670

Applicant(s)

YONEMURA, RYUGEN

Examiner

Omar Rojas

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 March 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 21-37 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 25-37 is/are allowed.
- 6) ☒ Claim(s) 21-24 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 0603.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Response to Amendment

1. With regards to the amendment filed on March 16, 2004 (hereinafter "The Amendment"), all the requested changes to the title, specification, and claims have been entered.

Response to Arguments

2. Applicant's arguments found on pages 23-25 of The Amendment with respect to the claims have been considered but are moot in view of the new ground(s) of rejection.

Information Disclosure Statement

3. The prior art documents submitted by applicant in the Information Disclosure Statement(s) filed on June 16, 2003 have all been considered and made of record (note the attached copy of form(s) PTO-1449).

Claim Objections

4. Claims 25 and 33 are objected to because of the following informalities: The last line of claim 25 appears grammatically incorrect. The examiner suggests using the phrase "sealer apparatus is enabled to hold said lens holding member". Claim 33 appears to contain a typographical error beginning with the third line of the claim which reads "s mounting member..." Appropriate correction is required.

Claim Rejections - 35 USC § 103

5. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

6. **Claim 21-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 6,061,493 to Gilliland et al. (hereinafter "Gilliland") in view of U.S. Patent 6,409,398 to Nakaya et al. (hereinafter "Nakaya").**

Gilliland discloses (e.g., see Fig. 4) an optical module comprising:

- an optical semiconductor element 120;
- a mounting member 122 having a mounting portion 115, and a supporting face;
- a lens 130 optically coupled to said semiconductor element 120;
- a lens holding member 102 having one end portion 114, another end portion 112, a side wall portion (not labeled), and an extending portion 126/127 for securing said lens 130, said side wall portion and extending portion 126/127 being arranged in a direction of a predetermined axis between said one end portion and other end portion; wherein said side wall portion has first and second inner surfaces.

Note that Gilliland does not expressly label the first and second inner surfaces of the lens holding member 102, nor does Gilliland describe an imaginary "inner reference surface" as recited by claim 21. Nonetheless, the imaginary "inner reference surface" disclosed by applicant (reference numeral 33a in the drawings) may be superimposed on Fig. 4 of Gilliland to define first and second inner surfaces of lens holding member 102 in accordance with claim 21.

Thus, Gilliland only differs from claim 21 in that Gilliland does not expressly disclose that his lens holding member 102 is welded to the mounting member and that the mounting member 122, lens holding member, and said lens 130 seal the semiconductor element 120.

Nakaya, on the other hand, discloses welding a lens holding member 16 to a mounting member 12 and welding a lens 17 to the lens holding member 16, thus providing a sealing for a semiconductor element 11. See Figure 3 of Nakaya and columns 3-4. Nakaya and Gilliland are both clearly analogous art. Furthermore, the lens holding member 102 of Gilliland is similar to that of Nakaya 16 in that both lens holding members are metallic. See Gilliland at column 7, lines 17-21 and Nakaya at column 4, lines 8-10.

The ordinary skilled artisan would have sought to use the materials and techniques of Nakaya for modifying the lens holding member 102 of Gilliland because Nakaya discloses numerous benefits such as improved positional accuracy and the elimination of solder or adhesive. See Nakaya at column 6, lines 56-65 and column 7, lines 5-8. Therefore, it would have been obvious to one of ordinary skill at the time of the claimed invention to obtain the invention specified by claim 21.

Regarding claim 22, the previous remarks are incorporated herein. Nakaya further discloses that his lens holding member 16 has a chamfer 22 (i.e., an inclined face at the end portion). See Nakaya at Figure 6a. Thus, when Gilliland is modified in accordance with Nakaya's teachings for the reasons discussed, all the limitations of claim 22 are met as well.

Regarding claim 23, the previous remarks are incorporated herein. Gilliland further teaches a sleeve 107 mounted on said end portion 112 of said lens holding member 102, said sleeve receiving an optical connector 108 therein. Thus, when Gilliland is modified in accordance with Nakaya's teachings for the reasons previously discussed, all the limitations of claim 23 are met as well.

7. Claim 24 is rejected under 35 U.S.C. 103(a) as being unpatentable over Gilliland in view of Nakaya as applied to claim 21 above, and further in view of US Patent 5,119,462 to Matsubara et al. ("Matsubara").

Gilliland in view of Nakaya appears to differ from claim 24 in that neither reference expressly discloses a cylinder with a diameter of 4.5 mm containing the lens holding member. Matsubara, on the other hand, does disclose a cylinder containing a lens holding member 4. See Fig. 1 of Matsubara. As disclosed by Matsubara, the cylinder 9 provides "increased environmental resistance." *Id.* at column 4, line 68. Thus, providing a cylinder to contain the lens holding member would have been obvious in Gilliland in view of Nakaya.

Matsubara does not expressly recite a diameter of 4.5 mm for his cylinder 9. However, such a diameter would appear to be a conventional choice to use in containing lens holding members (e.g., see Nakaya at column 6, lines 5-11) and thus would be inherent in Matsubara or, alternatively, obvious in view thereof since changes in size have generally been held to be obvious.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the claimed invention to obtain the invention specified by claim 24 by further modifying Gilliland in view of Nakaya with the teachings of Matsubara.

Allowable Subject Matter

8. Claims 25-37 are allowed.

9. The following is a statement of reasons for the indication of allowable subject matter: Regarding claims 25-32, none of the aforementioned references disclose or suggest alone, or in combination with an additional teaching, providing first and second outer surfaces such that an electrode of a seam sealer apparatus is enabled to hold the lens holding member. Regarding claims 33-37, none of the aforementioned references disclose or suggest, alone, or in combination with an additional teaching, providing an interval between the second inner surface and said mounting member greater than a maximum interval between the bonding wire and the mounting member.

Conclusion

10. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP.

§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the

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shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

11. Since all the cited references used in the above rejection were either submitted by applicant in the prior art statement or provided to applicant in a previous Office action, no copies thereof are being provided with this Office action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Omar Rojas whose telephone number is (571) 272-2357 and whose e-mail address is *omar.rojas@uspto.gov*. The examiner can normally be reached on Monday-Friday (7:00AM-3:00PM).


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hemang Sanghavi, can be reached on (571) 272-2358. The official facsimile number for regular and After Final communications is (703) 872-9306. The examiner's RightFAX number is (571) 273-2357.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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Omar Rojas
Patent Examiner
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or
May 28, 2004



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PRIMARY EXAMINER